

Cat. No. 60-2255

OWNER'S MANUAL

Please read before using this equipment.

Talking Chess Tutor

Radio Shack®

FEATURES

Talking Chess Tutor is a chess opponent with a mind of its own. Its voice has been developed to assist and amuse you. It has four personalities you can select from: character, coaching, demonstration, and move assistance. With a vocabulary of over 345 phrases, the tutor can teach and demonstrate, as well as tease and entertain you. This state-of-the-art technology game challenges you with an amazing computerized opponent that plays chess with skill and cunning.

Other features include the following:

- **Special Sensory Playing Surface** — Lets the computer automatically sense all game moves.
- **Dual power option** — Lets you play against this chess opponent anywhere.

Familiarize yourself with the instructions in this manual before attempting to engage the special features or set up the board positions.

Note: The Talking Chess Tutor needs four "AAA" batteries.

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CONTENTS

SETUP

Using Batteries	4
AC Operation	4
Full Reset	5
Setting The Voice Volume	5

BASIC CHESS INSTRUCTIONS

The Pieces and How They Move	6
The Game Board	7
Setting Up the Pieces	8
Game Rules	8
Checkmate —	
The Object of the Game	8
Capturing	9
Capturing En Passant	9
Pawn Promotion	9
Castling	9
Draw Games	10

GAME BOARD OPERATION

Turning the Game On or Off	12
Saving A Game	12
How to Enter Moves	13
Correcting Accidental Wrong	
Moves	16
Illegal Moves	16
Examples of Special Moves	17
En Passant Capture	17
Pawn Promotion	17
Castling	17

SPECIAL FUNCTIONS

Clear	18
Option	18
Shift	18
Verify	19
Level	20
Play Level Selection	20
Search Depth Display	21

Take Back	22
Hint	22
Move	23
Problem	23
Full Board Problem	24
Partial Board Problem	25
New	26
Repeat	26
Yes/No	26

GAME OPTIONS

Selecting Options	27
Easy Option	28
Two Player Option	28
Black Playing From the	
Bottom Option	28
Tournament Openings	28
Talking Chess Tutor's	
Personalities	29
Character Option	29
Coaching Option	29
Demonstration Option	29
Move Assistance Option	30
Deactivating Options	30

MAINTENANCE

Caring For Your	
Talking Chess Tutor	31
The FCC Wants You to Know	31

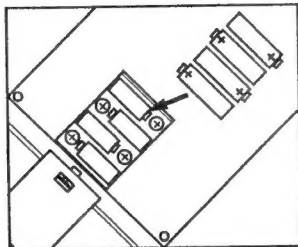
SPECIFICATIONS

Board Specifications	32
Operating Voltage	
Power Up Current	
Memory Mode Current	
System Clock Frequency	
Power Consumption	
Dimensions	
Weight	

SETUP

USING BATTERIES

The Talking Chess Tutor uses four "AAA" batteries. We recommend Radio Shack Cat. No. 23-555. Follow these steps to install the batteries.



1. Slide the battery cover in the direction of the arrow on the cover.
2. Place four fresh "AAA" batteries in the compartment, as indicated by the polarity symbols (+ and -) marked in the compartment.

Note: If the computer appears to behave erratically, announces illegal moves, or responds too slowly, replace the batteries.

Caution: Always remove and discard old or weak batteries. They can leak chemicals that can damage electronic circuits.

AC OPERATION

You can operate the computer from household AC power using an optional adapter. We recommend Cat. No. 273-1455.

Caution: You must use an AC adapter that supplies 9 volts and delivers at least 50 milliamps. Its center tip must be set to negative, and its plug must correctly fit the jack on the side of the game board. Using an adapter that does not meet these specifications could seriously damage the computer or the adapter.

Follow these steps to use AC power.

1. Insert the adapter's plug into the jack on the side of the game board.
2. Plug the adapter into a standard AC outlet.

FULL RESET

A full reset erases all previous options and starts a completely new game. You can do a full reset by turning the power off, and then on again. You can also do a full reset without turning the power off.

Follow these steps to do a full reset without turning power off.

1. Press **OPTION** — Shift light is off.
2. Press **SHIFT** — Shift light turns on.
3. Press **NEW** — Shift light is on. The computer asks you if you want to reset.
4. Press **YES**. The computer informs you that the game board is reset.

SETTING THE VOICE VOLUME

While the computer is waiting for you to make a move, activating **YES** raises the volume of the computer's voice. Each time you press **YES**, the computer says "all right" and the voice volume increases, until the computer announces "thank you" to signal that the voice is at the maximum volume setting.

While the computer is waiting for you to make a move, activating **NO** lowers the volume of the computer's voice. Each time you press **NO** the computer announces "no," and the voice volume decreases until the computer announces "I'm sorry" to signal that the voice is at the minimum volume setting.

BASIC CHESS INSTRUCTIONS

THE PIECES AND HOW THEY MOVE

There are 16 white and 16 black pieces — 32 in all. Each player has these pieces.

- 1 KING
- 1 QUEEN
- 2 BISHOPS
- 2 KNIGHTS
- 2 ROOKS
- 8 PAWNS

Each of the six kinds of pieces moves in a different way. All pieces can move as described below, but cannot move past an occupied square. The knight is the only exception to this rule.



The rook can move to any square in the vertical or horizontal direction.



The bishop can move to any square in the diagonal direction.



The queen can move to any square in the vertical, horizontal, or diagonal direction. (The queen's moves are a combination of the rook's and bishop's moves).



The knight can move one square in a horizontal or vertical direction, turn left or right and then move two additional squares in the other horizontal or vertical direction.

The knight can move even if the squares it moves through are occupied. The knight is the only piece that can jump another piece.



The king can move only one square in the vertical, horizontal or diagonal direction.



The pawn can only move forward, usually just one square. However, when it moves from its initial position, it can move 2 squares forward.

The pawn can only capture an opponent's piece by moving one square forward diagonally. A pawn cannot move diagonally unless it is capturing another piece. The pawn cannot capture a piece by moving directly forward. (See "Capturing En Pas-sant.")

A pawn can be promoted to a piece of a higher rank. (See "Pawn Promotion.")

THE GAME BOARD

80	A8	B8	C8	D8	E8	F8	G8	H8
70	A7	B7	C7	D7	E7	F7	G7	H7
60	A6	B6	C6	D6	E6	F6	G6	H6
50	A5	B5	C5	D5	E5	F5	G5	H5
40	A4	B4	C4	D4	E4	F4	G4	H4
30	A3	B3	C3	D3	E3	F3	G3	H3
20	A2	B2	C2	D2	E2	F2	G2	H2
10	A1	B1	C1	D1	E1	F1	G1	H1
	A0	B0	C0	D0	E0	F0	G0	H0
	A	B	C	D	E	F	G	H

Files are vertical
rows of squares
1 - 8

Ranks are
horizontal
rows of squares

In accordance with international chess notation, the game board is made up of eight vertical rows called files, and eight horizontal rows called ranks. Each file (left to right) is designated by a letter of the alphabet (A through H) and consists of eight squares alternately colored black and white. Each rank (bottom to top) is designated by a number (1 through 8) and also consists of eight squares alternately colored black and white. Each rank and file, therefore, consists of four black and four white squares.

Setting Up The Pieces

Follow these steps to set up the game board.

White playing from the bottom.

Rank 1:

- Place the rooks on A1 and H1
- Place the knights on B1 and G1
- Place the bishops on C1 and F1
- Place the queen on square D1
- Place the king on square E1

Rank 2:

- Place the pawns on each square (A2–H2)

Black playing from the top.

Rank 8:

- Place the rooks on A8 and H8
- Place the knights on B8 and G8
- Place the bishops on C8 and F8
- Place the queen on square D8
- Place the king on square E8

Rank 7:

- Place the pawns on each square (A7–H7)

When you are looking at the chessboard with the white pieces close to you, the kings are always on the right side of the queens.

GAME RULES

Checkmate — The Object of the Game

The object of the game is to position your pieces so the very next move you make would capture the opponent's king, and your opponent cannot move or protect the king or capture your piece. This is called "checkmate."

You can position one of your pieces so it directly threatens to capture your opponent's king. But if your opponent can move the king, or another piece, to escape capture, this is simply called "check."

Whenever a check situation occurs on the board, the computer announces **CHECK**. Whenever a checkmate situation occurs on the board, the computer announces **MATE**. If the computer determines you will soon be checkmated, it announces the number of moves until checkmate.

Capturing

To capture a piece, move your piece into the square occupied by the piece you are capturing. The captured piece is removed from the board.

Capturing En Passant

En Passant is a situation on the playing board that allows a pawn to capture an opponent pawn with a special move (see "Examples of Special Moves.") A pawn can capture an opponent pawn which has just moved 2 squares from its original position. This can only be done immediately after the opponent's pawn has moved two squares. Only a pawn can capture En Passant, and it can only capture another pawn this way.

The computer captures a pawn En Passant whenever it determines that such a move is desirable. It also recognizes when you choose to move En Passant. When performing an En Passant capture, the computer first indicates that its pawn should move in the usual way. Then it indicates the square of the captured pawn with flashing rank and file lights and the voice reminds you to remove it from the board.

Pawn Promotion

When a pawn gets all the way across the board and reaches the eighth rank, it may be promoted to a higher-value piece (usually a queen). On this game board, once you enter a pawn's move to your eighth rank (rank 8), the light for that file flashes until you identify the piece you wish to promote your pawn to by pressing the key next to its picture.

Note: All pieces are pictured next to the keys on the lower right corner of the playing board.

If one of the computer's pawns gets all the way across the board and reaches its eighth rank (rank 1), the computer evaluates its present position and promotes its pawn to the piece it determines to be of most value. Since this occurs automatically, use **VERIFY** to identify the promoted piece.

Notes:

- The promoted piece will not normally be changed out with the piece it is promoted to. All you need to do is REMEMBER which pawn is your promoted piece, and which pawn is the computer's promoted piece.
- You can substitute the promoted pawn if the piece it was promoted to is available.

Castling

Castling is a defensive move which protects the king from an advancing threat or a potential check or checkmate situation. It is designed to hide the king behind a fortified position.

The following four conditions must be met before you can castle.

1. The king has not moved from its original position.
2. The rook, which you want to move by castling, has not moved from its original position.
3. The king is not placed in check on its current square, the square to which it is going, and the square it passes over.
4. The squares between the king and the rook are not occupied.

In castling, the king and either rook move at the same time. The king moves two squares in the direction of the king's-side rook, or three squares in the direction of the queen's-side rook. The rook closest to the king moves to the other side of the king and to the square right next to the king. Castling counts as one move.

The computer castles whenever it determines that such a move is desirable. The computer castles by first moving its king and then its rook. The computer also recognizes when you choose to castle. Castle your king by moving the king first. When the computer recognizes your wish to castle, it lights up the rook's position to prompt you to move that piece.

Note: Castling is a king's move. If you attempt to castle by moving your rook first, the computer acknowledges your rook's move and immediately begins to think. To correct that mistake, use the **TAKE BACK** feature to take the rook's move back. Then move the king.

Draw Games

A draw is a game situation where neither opponent can win or lose without making an illegal move. The computer recognizes and claims three different types of draws:

- Draw by stalemate
- Draw by the 50-move rule
- Draw by three-time repetition

Draw by Stalemate:

The following situation is considered a stalemate:

- The king cannot move anywhere without being captured by the opponent's piece. (see "Illegal Moves")
- The player's king is not in check.
- No other piece on the board can move.

The computer claims this draw by announcing a stalemate. If a stalemate occurs, the game is over and cannot be continued. If desired, however, you may take back moves (see "Take Back") or change position (see "Problem").

Draw by the 50-Move Rule:

If 50 consecutive moves are played in a game where neither side moves a pawn or captures a piece, a draw by the 50-move rule must be claimed. When the computer detects that such moves have been made, it claims a draw by announcing it.

Draw by 3-Time Repetition:

If a piece is moved to a location on the board, but a return to the same location is repeated three times by the same side, a draw by three-time repetition must be claimed. If the computer is about to make a move that results in the same location on the board being repeated for the third time, or if the computer recognizes that its opponent has made a move that results in a third repetition, it claims a draw by announcing it.

GAME BOARD OPERATION

TURNING THE GAME BOARD ON OR OFF

To turn on the Talking Chess Tutor, set **SAVE/ON/OFF** to **ON**. Talking Chess Tutor greets you and challenges you to a "nice game of chess." The **D** light flashes, indicating it is white's turn to move (in this case, to make the first move of the game).

Notes:

- The computer always starts a new game with you playing white pieces and the computer playing black pieces.
- A new game is always started when power is first turned on or when **NEW** is pressed.
- When the game is first turned on, only the automatic announcements are activated; special features or game options are not activated. (See "Special Functions" and "Game Options.")

To turn off the Talking Chess Tutor, set **SAVE/ON/OFF** to **OFF**.

Note: Turning off power resets the program to pre-game conditions and removes all previously selected options.

SAVING A GAME

SAVE turns off the game board lights, voice, and key inputs but maintains power to memory. The game situation is unchanged because the computer stores in memory all game positions and any next-move calculations it was computing.

Follow these steps to save a game for later play.

1. Set **SAVE/ON/OFF** to **SAVE**.

Notes:

- **SAVE** stores in memory only one game at a time — the game being played when **SAVE** is activated.
- Pressing **OFF**, **NEW**, or **CLEAR** erases any game stored in memory.

2. To return to the saved game, set **SAVE/ON/OFF** to **ON**.

Note: If the computer was calculating a move when you switched to **SAVE**, but had not yet completed all calculations needed to make a decision on a move, switching to **ON** causes it to make a move.

HOW TO ENTER MOVES

Playing chess against your computer is like playing with a human opponent — you make your move, and the computer responds with its move. The only difference is that you must physically move the computer's pieces. To make a move, press down gently on the center of the **FROM**, then the **TO** squares. The **FROM** square is the current location of the piece you plan to move; the **TO** square is the location of the square you are moving to.

Note: The sensor area within each square on the game board is smaller than the base of the chess pieces. For best results, tilt the piece to be moved and press down on the center of the square with the edge of the base.

There is a red light next to each number in the eight ranks, and a green light next to each letter in the eight files. Lights **D** and **E** are used to indicate which side is currently at play. **D** light is located just below a white square, and when it flashes it indicates it is white's turn to move. **E** light is located just below a black square, and when it flashes it indicates it is black's turn to move.

The rank and file lights are also used to indicate moves you enter or moves the computer wants to enter.

Follow these steps to enter moves.

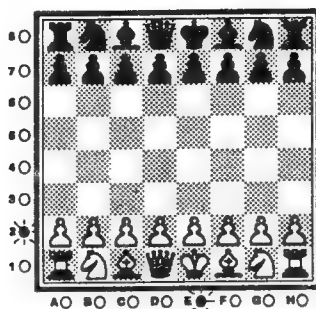
1. When it is your turn to move, press the **FROM** square with the piece you want to move. The corresponding number and letter lights turn on.
2. Press the **TO** square you want to move the piece to. The **E** light begins flashing, indicating that it is black's turn and the computer starts calculating its next move.

Note: The computer might respond instantly, so you may not see **E** flashing.

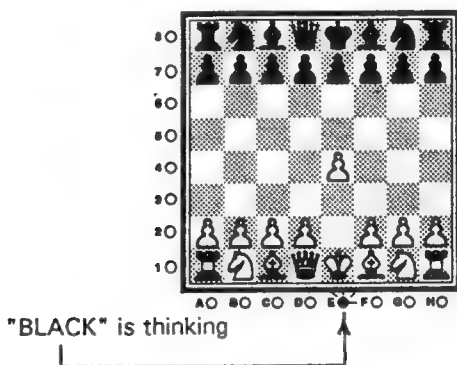
3. When it is the computer's turn to move, one number light and one letter light turn on to show which square the computer wants to move a piece from (**FROM** light).
4. After you respond by pressing the **FROM** square, one number light and one letter light turn on to show which square the computer wants to move that piece to (**TO** light).
5. When you respond by pressing the **TO** square, the **D** light begins flashing to indicate it is your turn to move.

Here's an example of how to move pieces and communicate with the computer. Try it now!

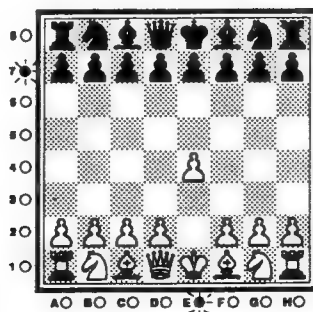
1. Press **E2** (white pawn) until the **FROM** lights for file **E** and rank **2** turn on.



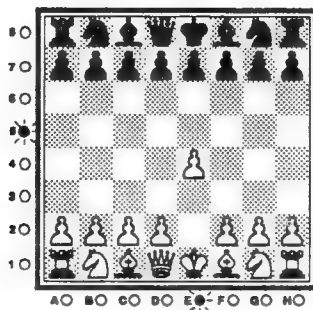
2. Move the pawn and press **E4** until the **E** and **2** lights go out. The computer records your move and begins to think about its move.



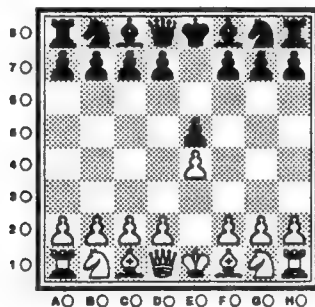
3. The computer shows you its move by turning two lights on for its **FROM** square. For this example we will say the **E** and **7** lights turn on (you might get a different response).



4. Press **E7** with the black pawn until the **FROM** lights go out and two different lights show you the **TO** location for the pawn. We will say the **E** and **5** lights turn on, indicating the computer has chosen **E5** (you might get a different response).



5. Move the pawn and press **E5** until the **TO** lights go out. When the **D** light begins flashing, it is your turn to move.



For each move, remember the three basic steps: **PRESS**, **MOVE**, and **PRESS** again.

CORRECTING ACCIDENTAL WRONG MOVES

If you press down on a piece and the **FROM** lights turn on, but you decide not to make that move, press **CLEAR**. This turns the **FROM** lights off and you can enter another move.

When you complete a move, the computer accepts it and immediately considers its next move. If you change your mind after completing a move, wait for the computer to indicate the move it wants to make. Enter the computer's move (see "Entering Moves") then press **TAKE BACK**. The computer shows you how to take back its last move (see "Take Back"). After you take back the computer's last move, press **TAKE BACK** again. The computer shows you how to take back your last move.

Illegal Moves

The computer only allows moves that are in compliance with the rules of chess. Illegal moves are not accepted. This computer notifies you of an illegal move or error by announcing the illegal move, beeping a tone, and flashing the lights corresponding to the **FROM** square that was pressed.

The following circumstances cause the computer to beep an illegal move indication.

- Pressing down on a piece of the wrong color (for example, it is white's turn and you press down on a black piece).
- Pressing down on the wrong square when making the computer's move on the board (for example, the computer lights up **D8** and you inadvertently press **D7**).
- Pressing down on an empty square without having first pressed down on a piece which can move to that square.
- Moving a piece that puts your own king in check or checkmate.

To undo the error, you have several options:

- Pick up that piece and press it down on the square you actually intended to move it to.
- Press the piece back down on the flashing **FROM** square (the light goes out). Enter another move.
- Press **CLEAR**. The flashing **FROM** lights turn off. Put the illegally moved piece back on its original **FROM** square. Move another piece of your choice and enter.

Note: This method does not insure that the incorrectly moved piece has been returned to its original location. It leaves it up to you to replace the piece correctly.

EXAMPLES OF SPECIAL MOVES

En Passant Capture

Follow this example to capture an opponent's pawn En Passant.

1. The white pawn advances to **E5**. The black pawn is still in its original position **D7**.
2. The black pawn advances from **D7** to **D5**.
3. The white pawn advances to **D6** (one square behind the black pawn's position). The black pawn is captured, even though the exact square it is on is not occupied by the white pawn.

Pawn Promotion

Follow this example to promote a pawn to a queen.

1. If your pawn reaches square **E8**, file light **E** flashes.
2. Press **OPTION**.
3. Press the key next to (queen symbol). The computer accepts a queen in position **E8**, **E** light goes out, and the computer starts thinking about its next move.

Castling

Follow these steps to perform a white king's side castle.

1. Tilt the king and press **E1**. **E** and **1** lights turn on steadily.
2. Move the king and press **G1**. **H** and **1** lights turn on steadily.
3. Tilt the rook and press **H1**. **F** and **1** lights turn on flashing.
4. Move the rook and press **F1**. All lights turn off and the computer records the castling move.
5. The computer indicates its next move.

Follow these steps to perform a white queen's side castle.

1. Tilt the king and press **E1**. **E** and **1** lights turn on steadily.
2. Move the king and press **C1**. **A** and **1** lights turn on steadily.
3. Tilt the rook and press **A1**. **D** and **1** lights turn on flashing.
4. Move the rook and press **D1**. All lights turn off and the computer records the castling move.
5. The computer indicates its next move.

SPECIAL FUNCTIONS

The lower right side of the game board contains red and silver board function keys.

IMPORTANT: When pressing a key, always push down on the center of the key area so the computer can register your action correctly.

CLEAR

Use clear for the following:

- To clear an accidentally activated **FROM** square (before you move to a **TO** square).
- To erase illegal move indication.
- To exit **OPTION**, **HINT**, **PROBLEM**, **VERIFY**, **SHIFT**, and **LEVEL SELECT** modes.



OPTION

This lets you select options such as game difficulty and the Tutor's personality modes. These options are selectable when you start a new game or when it is your turn to move during a game. Options can be activated by pressing various squares on the playing surface (see "Game Options").

SHIFT

This causes the computer to shift between available functions. Each time you press **SHIFT**, the computer toggles between "shift-on" and "shift-off" and a tone sounds. A red light next to the SHIFT key indicates if shift is on. If the SHIFT light is on, any upper (red) key functions may be selected. If the SHIFT light is off, any lower (silver) key functions may be selected.

To use the lower (silver) key functions when the SHIFT light is on, press **SHIFT** until the light turns off.

VERIFY

Verify lets you know where the positions of all white or black pieces should be before or during a game. Each time you press a key, two lights ("Rank" and "File") turn on to show where a piece should be located.

Note: If the piece is **WHITE**, the file lights turn on steadily. If the piece is **BLACK**, the file lights flash.

Follow these steps to verify the position of any piece.

1. Press **VERIFY**. The computer automatically verifies the white queen position because the **VERIFY** key is also the queen key.

Note: Once you press **VERIFY**, all function keys become piece identification keys until you press **CLEAR**.

2. Press the queen key to verify the black queen position.
3. Press another key next to the picture of the next type of piece you are interested in.

Symbol	Key	Symbol	Key
King	OPTION	Queen	PROBLEM/VERIFY
Rook	NEW/LEVEL	Bishop	REPEAT/TAKE BACK
Knight	YES/HINT	Pawn	NO/MOVE

4. Press **CLEAR** to return to normal play.

For any given piece selected, the computer automatically shows you the rank and file lights for the square occupied by that piece. If there is more than one piece of that type (for example, bishops or promoted pawns), all rank and file lights for all those pieces on the board turn on.

If there is more than one piece of the type you are looking for, the rank and file lights for each piece on the board turn on one at a time.

If you press	You get lights	Piece position is
(pawn) once	A, B, C, F, G, and 2	A2, B2, C2, F2, G2
(pawn) twice	D and 3	D3
(pawn) three times	E and 4	E4

Since the computer continuously records all moves as the game progresses, if there are no pieces of that type remaining on the board when you press **VERIFY**, only **A8** in the upper left corner of the board turns on to indicate this. Unoccupied ranks are skipped over. Repeating this process for each piece type verifies that every piece on the board is correctly placed.

LEVEL

Level lets you select from 25 levels of play. Level **A1** is automatically selected when the computer is first turned on. The first time you activate **LEVEL**, the **A** and **1** lights turn on to show this.

Play Level Selection

Follow these steps to select another level of play.

1. Press **LEVEL** and the appropriate board square as shown by the following illustration.

PRESET TIME CONTROL Avg. Time/Move (Total Number Moves/Time)		SELECT ANY SQUARE FOR INFINITE LEVEL				FIXED DEPTH LEVELS	MATEFINDER LEVELS
AVG. RESPONSE 3 MIN (40/2 HR)			SELECT			8 MOVES	MATE IN 8
A8	B8	C8	D8	E8	F8	G8	H8
AVG. RESPONSE 2 MIN (30/1 HR)			ANY ONE			7 MOVES	MATE IN 7
A7	B7	C7	D7	E7	F7	G7	H7
AVG. RESPONSE 1 MIN (60/1 HR)			OF THESE			6 MOVES	MATE IN 6
A6	B6	C6	D6	E6	F6	G6	H6
AVG. RESPONSE 30 SEC (60/30 MIN)			SHADED			5 MOVES	MATE IN 5
A5	B5	C5	D5	E5	F5	G5	H5
AVG. RESPONSE 15 SEC (60/15 MIN)			SQUARED			4 MOVES	MATE IN 4
A4	B4	C4	D4	E4	F4	G4	H4
AVG. RESPONSE 5 SEC (60/5 MIN)			FOR			3 MOVES	MATE IN 3
A3	B3	C3	D3	E3	F3	G3	H3
AVG. RESPONSE 2 SEC (60/2 MIN)			INFINITE			2 MOVES	MATE IN 2
A2	B2	C2	D2	E2	F2	G2	H2
AVG. RESPONSE 1 SEC (60/1 MIN)			LEVEL			1 MOVE	MATE IN 1
A1	B1	C1	D1	E1	F1	G1	H1

2. Press **CLEAR** to exit the **LEVEL** selection mode.

The following is a detailed description of the various levels.

- **Preset Levels (A1-A8)** restrict the computer's thinking time with preset time limits. The chart shows the average response time for each of the preset levels.

Example: Square A1 shows the computer's average response time of 1 second per move and the overall 60 moves per minute time control.

- **Fixed Depth Levels (G1-G8)** restrict the computer's ability to look ahead by a selectable number of half moves (one half move equals one move for one player).

of unit **Example:** For example, Level **G2** restricts the computer's look ahead to two half moves.

Using the fixed depth levels lets you control how far ahead your opponent can analyze its next move.

- **Mate-Finder Levels (H1-H8)** let you set up mate problems for the computer to solve. The computer announces if mate is not possible within the number of moves you specify.

Example: If you set up a problem and want the computer to search for a mate in 6 moves, set the computer to **Level H6**. As *turns* you enter the indicated opponent's moves, the computer turns on the rank and file lights to show its moves to mate.

- **Infinite Levels** (any board squares in files B, C, D, E, or F) gives the computer unlimited time for each move. The computer continues to search, looking deeper and deeper until a forced mate is found or until you halt the search. When halted, the computer makes the best move it has found thus far in its search.

To halt the computer's thinking at any time, press **MOVE**.

To cancel or exit the Level Function, press **CLEAR**.

Search Depth Display

The **LEVEL** key also allows you to see how deep the computer is searching in thinking about a move. To use this function, press **LEVEL** while the computer is thinking. The computer shows you the number of half-moves it is thinking ahead at that time by flashing one of the number lights.

After you do this, the computer shows the search depth automatically after each move (while it thinks about its next move).

TAKE BACK

The **TAKE BACK** function lets you take back any move you make or any move the computer makes. The computer lets you to take back a total of 64 half moves (32 moves per side) in a single game.

Follow these steps to take back a move.

1. Press **TAKE BACK**. The light indicating the **TO** square of the last move turns on.
2. Press the indicated **TO** square. The light indicating the **FROM** square of the last move turns on.
3. Move the piece from the **TO** position to the **FROM** position.
4. Press the indicated **FROM** square. The light goes out. The take-back is complete.

To take back additional moves, press **TAKE BACK** again and proceed as outlined above. As you take back moves, the computer reminds you to return a captured piece to the board by turning on the square lights of the previously captured piece. Return the captured piece to the board and press down on the indicated square. If you do not recall the identity of the captured piece, press down on the indicated square and then use **VERIFY** to find out what type of piece belongs on that square.

HINT

The **HINT** function causes the computer to suggest a move for you. You can use **HINT** in one of two ways:

- To get a suggested move from the computer, press **HINT** when it is your turn to move. The computer suggests a move using the board lights. The **FROM** and **TO** lights turn on at the same time. Steadily lit rank and file lights indicate the **FROM** piece to be moved. Flashing rank and file lights indicate the **TO** position to move the piece to.

Notes:

- If the computer suggests moving a piece **FROM** or **TO** in the same rank or file, the rank or file lights will turn on steadily until you enter the **FROM** move, then the rank or file lights begin to flash to show the computer's suggested move.

Example: The computer suggests moving king's pawn from E2 to E4. The **E** and **2** lights turn on steadily, and the **4** light flashes. Enter your **FROM** move by pressing **E2**. The **2** light turns off and the **E** and **4** lights flash until you enter the suggested move.

- You can make the suggested move or a different one.
- Record the suggested **FROM** and **TO** positions before moving because all lights go out when you press on the **FROM** position.
- To get an alternate suggested move from the computer for the last hint given, simply use the take back feature to take back moves in the sequence — black's move, white's move, then black's move. Enter a different move for black, light **D1** flashes indicating white's move. Press **HINT**, the computer suggests an alternate move in place of the previous hint given.

MOVE

MOVE lets you do the following:

- Change sides with the computer. Press **MOVE** when it is your turn to move. The computer takes over your pieces and makes a move. You may now enter moves for the computer's side and continue to play the same game.
- Watch the computer play both sides. Press **MOVE** after you make the computer's indicated move.
- Force the computer to stop thinking and make a move. Press **MOVE** while it is the computer's turn and the computer is thinking.

PROBLEM

PROBLEM lets you set up a game or change the game in the following ways:

- Change, remove or add pieces any time before or during a game. You can get back lost pieces or even move your king out of an imminent check-mate situation.
- Relocate pieces from one square to another. This changes the direction of the game or strengthens your (or the computer's) position.
- Set up problems or puzzles for the computer to solve.

You can enter the problem mode whenever it is your turn to move. While in the problem mode, the function keys become chess piece selector keys. Each key is used to select the type of chess piece that is pictured next to it.

Before using this feature to create your own positions, familiarize yourself with this mode by setting up the board problem described in the following examples.

Full Board Problem

1. Press **NEW** and set up the pieces in their initial positions. (See "Setting Up the Pieces.")

Note: When you press **NEW**, the computer assumes that you set up all the pieces to their initial starting positions (full board set up).

2. Press **PROBLEM** to enter the problem mode.
3. Press the pawn key. Lights **A-H** and **2** turn on steadily to indicate the positions of all white pawns at the beginning of a game.
4. Press **E2**. **E** flashes. Press **E2** again. The **E** light turns off and the computer erases a pawn from **E2**.
5. Move the white pawn to **E4** and press down. Lights **E** and **4** turn on steadily and the computer records a white pawn on **E4**.
6. Press the knight key. Lights **B, G**, and **1** turn on steadily to indicate the positions of the white knights at the beginning of a game.
7. Press **G1**. **G** flashes. Press **G1** again. The **G** light turns off and the computer erases a knight from **G1**.
8. Move the white knight to **F3** and press down. Lights **F** and **3** turn on steadily and the computer records a white knight on **F3**.
9. Press the pawn key until lights **A-H** and **7** turn on flashing to indicate the positions of all black pawns at the beginning of a game.
10. Press **D7**. The **D** light turns off and the computer erases the pawn from **D7**.
11. Move the black pawn to **D5** and press down. Lights **D** and **5** turn on steadily. Press **D5** again. **D** flashes and the computer records a black pawn on **D5**.
12. Press **CLEAR** to exit the **PROBLEM** mode.

Note: In the full board problem set up described in the above steps, the computer records the positions you entered into memory and assumes all other pieces remain in their initial positions.

Partial Board Problem

If the problem you want to set up involves only a few pieces, set up a partial board problem situation as follows:

1. Press **OPTION** and then **VERIFY**.
2. The computer will ask you if you want to clear the board or not. Press **YES**.
3. The computer now informs you that the board is clear and it is ready to set up queens. You may now press the key adjacent to the symbol of the type piece you want to place on the board.
 - To enter it as a white piece — press that square once.
 - To enter it as a black piece — press that square twice.
4. Once you have entered all the required pieces you want, press **CLEAR** to exit the problem mode.

Note: In a partial board problem the computer records into memory only the pieces entered using **VERIFY** and assumes all other positions are vacant.

When you exit the problem mode, the computer always assumes that it is white's turn to move first, and that you are white.

If the problem position you have arranged calls for you to be white and to move first, enter your move. If you want the computer to be white and move first, press **MOVE**. If you want black to move first, follow the steps above but enter a white piece's board position one move prior to the actual problem position. For example, if the board position calls for a white pawn to be on square **E4**, enter the white pawn on square **E2**. Set up all other pieces for the specified board position and press **CLEAR**. Move the white pawn from **E2** to **E4**, and then it will be black's move.



NEW

Pressing **NEW** causes the computer to start a new game. If you tend to select the same options for most games, this function is especially handy since it provides you with an easy shortcut.

If you have just finished a game in which you made option selections, they remain in effect for the next game if you press **NEW** only.

Note: When you turn on the computer or do a full reset, the computer always resets to level **A1**, all options are cleared, and all the pieces are expected to be in their initial starting positions (full board setup).

REPEAT

Pressing **REPEAT** causes the last announcement made to be repeated. It can be used as many times as necessary.

YES/NO

The **YES** function serves two purposes:

1. To answer **YES** to a question from the computer.
2. To raise the volume of the computer's voice. Use it while it is your turn, before you make a move. (See "Setting the Voice Volume.")

The **NO** function serves two purposes:

1. To answer **NO** to a question from the computer.
2. To lower the volume of the computer's voice. Use it while it is your turn, before you make a move. (See "Setting the Voice Volume.")

GAME OPTIONS

SELECTING OPTIONS

In addition to the keys and special features described previously, you can select additional options to enhance your use of the computer. These options are selectable when you start a new game or when it is your turn to move during a game. Options can be activated by pressing various squares on the playing surface. You can select Play Options or Talking Chess Tutor's Personalities. You can also select options that allow you to use different levels of difficulty or board set ups.

Follow these steps to select options.

1. Press **OPTION**. Normal game play is suspended and lights 1-4, and A-B light up steadily.
2. Use a game piece to press **A1** through **H1** and select desired options described in this section.

EASY MODE A1	VOICE MODE B1	MONITOR MODE C1	BLACK FROM BOTTOM D1	VOICE COACH MODE E1	CANCEL BOOK F1	VOICE DEMO MODE G1	VOICE MOVE ASSIST H1
A ●	B ●	C ●	D ●	E ●	F ●	G ●	H ●

Notes:

- You can choose more than one option at a the same time.
 - As each option is selected, the light below that square turns on to acknowledge the selected option.
3. Press **OPTION** to cancel any option. The light below it goes out to indicate the option is no longer in effect.
 4. After you select your option(s), press **CLEAR** to exit the option select mode.
 5. If you decide to cancel an option after pressing **CLEAR** to exit the option select mode, press **OPTION** again to re-enter this mode.

EASY OPTION

Ordinarily, the computer does its thinking on your time — while you are contemplating your next move. This feature is part of what makes your computer such a tough opponent.

The computer's Easy option weakens all playing levels by restricting the computer's allotted time. It prevents the computer from thinking on your time. To activate the Easy Option, press **OPTION, A1, and CLEAR**.

TWO PLAYER OPTION

This option lets you play against a friend. The computer acts as a referee — checking each move for legality and keeping track of the time taken by each player, per move. The repeat, take back, and move features also function.

Note: If you select **MOVE**, the computer takes over the next move. After the computer makes the move, it returns to the Two-player option.

To activate the two-player option, press **OPTION, C1, and CLEAR**.

To exit the two-player option and continue the game against the computer, press **OPTION, C1, and CLEAR**. Make your next move. The computer takes over the other player's side.

BLACK PLAYING FROM THE BOTTOM OPTION

This option lets you play with the black pieces set up at the bottom of the board. To have the computer instruct you how to set up the pieces correctly, press **VERIFY**. Once you have verified the proper set up, press **MOVE** to start the computer's thinking (the computer moves first since it is now playing the white pieces).

Note: Switching to this option during a game is not advised.

To activate the Black Playing from the Bottom option, press **OPTION, D1, and CLEAR**.

TOURNAMENT OPENINGS

The computer uses a tournament book library to select from a greater variety of opening moves. You can use the Tournament Openings option to lock out the computer's tournament book library. If you select this option, the computer only plays those opening moves it calculates are best.

To choose the Tournament Openings option, press **OPTION, F1, and CLEAR**.

TALKING CHESS TUTOR'S PERSONALITIES

You can select options that allow you to use one or more of computer's four personalities. The personalities are designed to assist or amuse you.

Notes:

- Unless you activate one or more personalities (Character, Coaching, Demonstration, and Move Assistance), the computer only makes check, mate (checkmate), and draw announcements, along with illegal move warnings.
- Talking Chess Tutor's beep tone will continue to function even if all voice personalities are deactivated.

Character Option

This selects the computer's "fun" personality. The computer makes entertaining remarks about events that occur during the game. Choose the Character option to amuse yourself and/or your friends during a game.

To activate the Character option, press **OPTION, B1**, and **CLEAR**.

Coaching Option

This option determines the computer's "motivating" personality. The computer makes comments during a game designed to be helpful to chess beginners or players who have been inactive for awhile.

Note: The helpful comments are limited (i.e. suggesting which piece to move, but not where or how to move it; which piece to protect, but not how to protect it).

To activate the Coaching option, press **OPTION, E1**, and **CLEAR**.

Demonstration Option

This option determines the computer's "teaching" personality. The computer walks you through your first move for each piece. To activate the Demonstration option, press **OPTION, G1**, and **CLEAR**.

Follow these steps to hear an announcement on each piece before you begin to play.

1. Press the piece on its starting square.
2. Listen to the announcement.
3. Press **CLEAR**.
4. Repeat Steps 1–3 for the next piece you are interested in learning about.

Note: Piece announcements are made only once on the first move of each piece. Once a piece has completed its first move, the computer does not make any more announcements for that piece until a new game begins.

If you activate both the Demonstration and Coaching options before or during a game, the computer advises you on how each piece moves on the chess board.

Move Assistance Option

This option determines the computer's "assistance" personality. It is designed for beginners or visually handicapped persons and allows the computer to literally announce all moves and key presses to assist the user.

To activate the Move Assistance option, press **OPTION**, **H1**, and **CLEAR**.

DEACTIVATING OPTIONS

Follow these steps to deactivate all sounds except illegal move announcements.

1. Press **OPTION**. The normal game play is suspended, the computer enters the Option Select Mode, and lights **1–4**, and **A–B** light up steadily.
2. Press **B1**, **E1**, **G1**, and **H1** until you hear the deactivate announcement for the selected options.
3. Press **LEVEL** then **CLEAR**. All sounds, except illegal move announcements, are deactivated. The computer exits the Option Select Mode, and normal game play is resumed.

To adjust the volume of the computer's voice, see "Setting the Voice Volume."

MAINTENANCE

CARING FOR YOUR TALKING CHESS TUTOR

Your Talking Chess Tutor is an example of superior design and craftsmanship. The following suggestions will help you care for the Talking Chess Tutor so you can enjoy it for years.

- Keep the Talking Chess Tutor dry. If it does get wet, wipe it dry immediately. Liquids might contain minerals that corrode the electronic circuits.
- Use and store the Talking Chess Tutor only in normal temperature environments, and avoid sudden temperature changes. Temperature extremes can shorten the life of electronic devices.
- Use only fresh batteries of the recommended size and type.
- Handle the Talking Chess Tutor gently. Dropping it can damage the circuit boards and cause the Talking Chess Tutor to work improperly.
- Keep the Talking Chess Tutor away from dust and dirt, which can cause premature wear of parts.
- Wipe the Talking Chess Tutor with a damp cloth occasionally to keep it looking new. Do not use harsh chemicals, cleaning solvents, or strong detergents to clean the Talking Chess Tutor.

Modifying or tampering with the Talking Chess Tutor's internal components can cause a malfunction and might invalidate the warranty and void your FCC authorization to operate it. If the Talking Chess Tutor is not performing as it should, take it to your local Radio Shack store for assistance.

THE FCC WANTS YOU TO KNOW

Your Talking Chess Tutor might cause television or radio interference even when it is operating properly. To determine whether your Talking Chess Tutor is causing the interference, turn it off. If the interference goes away, your Talking Chess Tutor is causing the interference. To try to eliminate the interference:

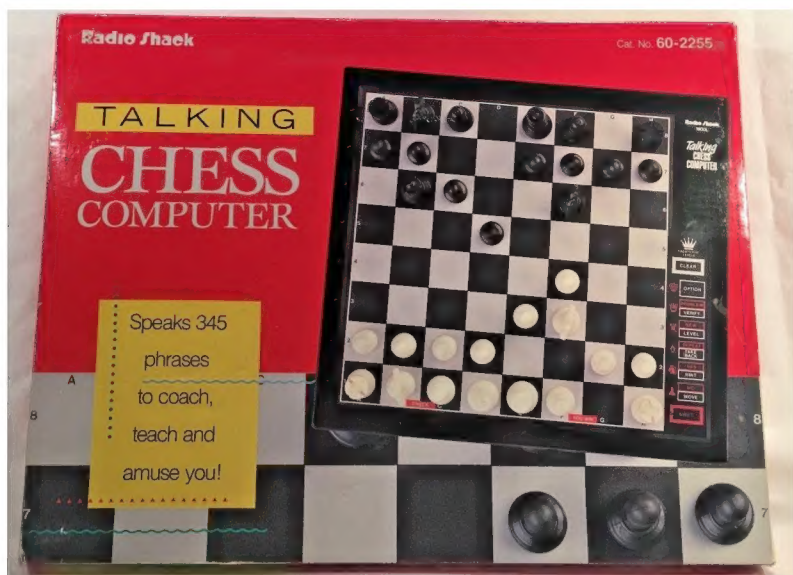
- Move your Talking Chess Tutor away from the receiver.
- Contact your local Radio Shack store for assistance.

If you cannot eliminate the interference, the FCC requires that you stop using your Talking Chess Tutor.

SPECIFICATIONS

Operating Voltage	6V DC (Battery) 9V DC (Adapter)
Power Up Current	8.5 mA
Memory Mode Current	3 mA
System Clock Frequency	8 MHz
Power Consumption	125 mW
Dimensions	10 ¹ / ₄ x 9 ⁷ / ₁₆ x 7 ⁷ / ₈ Inches (HWD)
Weight	8.5 oz.

NOTES





RADIO SHACK LIMITED WARRANTY

This product is warranted against defects for 90 days from date of purchase from Radio Shack company-owned stores and authorized Radio Shack franchisees and dealers. Within this period, we will repair it without charge for parts and labor. Simply **bring your Radio Shack sales slip** as proof of purchase date to any Radio Shack store. Warranty does not cover transportation costs. Nor does it cover a product subjected to misuse or accidental damage.

EXCEPT AS PROVIDED HEREIN, RADIO SHACK MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Some states do not permit limitation or exclusion of implied warranties; therefore, the aforesaid limitation(s) or exclusion(s) may not apply to the purchaser.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

We Service What We Sell

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